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ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR CONFIRMATION NO. 10/705,586 11/10/2003 Ji Hoon Lee 29456.009 4275 **EXAMINER** 21878 05/30/2006 KENNEDY COVINGTON LOBDELL & HICKMAN, LLP CHUNG, SUSANNAH LEE 214 N. TRYON STREET ART UNIT PAPER NUMBER **HEARST TOWER, 47TH FLOOR** 

1626

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application | Application No. |            | Applicant(s) |  |
|--|---|-------------|-----------------|------------|--------------|--|
| Office Action Summary  |   | 10/705,586  |                 | LEE ET AL. |              |  |
|  |   | Examiner    |                 | Art Unit   |              |  |
|  |   | Susannah C  | hung            | 1626       |              |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |             |                 |            |              |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |             |                 |            |              |  |
| Status   |   |             |                 |            |              |  |
| 1)⊠  | Responsive to communication(s) filed on 19 April 2006.  |             |                 |            |              |  |
|  | This action is <b>FINAL</b> . 2b) This action is non-final.   |             |                 |            |              |  |
| ′=   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |             |                 |            |              |  |
| -/1  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                       |             |                 |            |              |  |
| Disposition of Claims  |   |             |                 |            |              |  |
| 4)⊠  | ☑ Claim(s) <u>1,4,5 and 9-13</u> is/are pending in the application.   |             |                 |            |              |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |             |                 |            |              |  |
| 5)🖂  | Claim(s) <u>10-13</u> is/are allowed.   |             |                 |            |              |  |
| 6)⊠  | Claim(s) <u>1 and 9</u> is/are rejected.  |             |                 |            |              |  |
| 7)🖂  | Claim(s) <u>4 and 5</u> is/are objected to  |             |                 |            |              |  |
| 8)□  | 8) Claim(s) are subject to restriction and/or election requirement.   |             |                 |            |              |  |
| Application Papers   |   |             |                 |            |              |  |
| 9) The specification is objected to by the Examiner.   |   |             |                 |            |              |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |   |             |                 |            |              |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |             |                 |            |              |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |             |                 |            |              |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |             |                 |            |              |  |
| Priority under 35 U.S.C. § 119   |   |             |                 |            |              |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |   |             |                 |            |              |  |
| Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  4) Interview Summary (PTO-413) Paper No(s)/Mail Date  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152) 6) Other:   |   |             |                 |            |              |  |

#### **DETAILED ACTION**

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Claims 1, 4, 5, and 9-13 are pending in the instant application.

### Response

Applicant's response and amendment to the claims filed on 04/19/2006 is acknowledged.

Claims 1 and 5 stand rejected under 35 USC 102(b). In view of the amendment to the claim, the 102(b) rejection of Claims 1 and 5 are withdrawn.

Claims 1, 4, and 5 stand rejected under 35 USC 103(a). In view of the amendment to the claims, the 103(a) rejections of Claims 4 and 5 are withdrawn. The 103(a) rejection of Claim 1 stands. In addition, the amendment to Claim 1 necessitates the following new 35 USC 112, 1<sup>st</sup> and 2<sup>nd</sup> paragraph rejections. In accordance with MPEP 803.02, if on examination the elected species is found to be anticipated or rendered obvious by prior art, the Markush-type claim and claims to the elected species shall be rejected, and claims to the nonelected species would be held withdrawn from further consideration. A second action on the rejected claims can be made *final* unless the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p). See MPEP § 706.07(a).

#### Allowable Subject Matter

Claims 4 and 5 are directed to an allowable product, if amended to overcome the objection below. Pursuant to the procedures set forth in MPEP § 821.04(B), claims 9-13, directed to the process of making or using an allowable product, previously withdrawn from

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consideration as a result of a restriction requirement, Claims 9-13 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Because all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the restriction requirement as set forth in the Office action mailed on 19 October 2005 is hereby withdrawn. In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claims including all the limitations of an allowable product claim or rejoined process claim are presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPO 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

## Claim Rejections - 35 USC § 112, 1st paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The "unstable, methyl-substituted" compound and "high energy, unstable molecule" of Claims 1 and 9 are not defined in the specification so as to know the structures of the compounds that are included and/or excluded by the term. Therefore, the specification lacks adequate support for Claims 1 and 9.

# Claim Rejections - 35 USC § 112, 2<sup>nd</sup> paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, Claims 1 and 9 are indefinite because the terms "unstable, methyl-substituted" compound and "high energy, unstable molecule" of Claims 1 and 9 implies the formulation is not limited to compounds of the instant claims.

Therefore the metes and bounds of the claim are unascertainable and the claims are indefinite.

The 112 rejections of claims 1 and 9 can be overcome by deleting the claims.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Objections**

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Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In addition, Claims 10-13 directed to a method of producing a methyl-substituted compound are allowable. The closest prior art of record is US Pat. No. 5,922,715 (Nelson et al.), which teach similar diimidazole compounds, except they are not methyl substituted.

### Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susannah Chung whose telephone number is (571) 272-6098. The examiner can normally be reached on M-F, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susannah Chung Patent Examiner, AU 1626 23 May 2006

KAMAL A. SAEED, PH.D. PRIMARY EXAMINER

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